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JOINT PHOTOGRAPHIC INTELLIGENCE MEMORANDUM



RAILROAD YARDS AND SHOPS BARNAUL/CHESNOKOVKA, L'SSR





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HTA/JM-2/58 21 MARCH 1958

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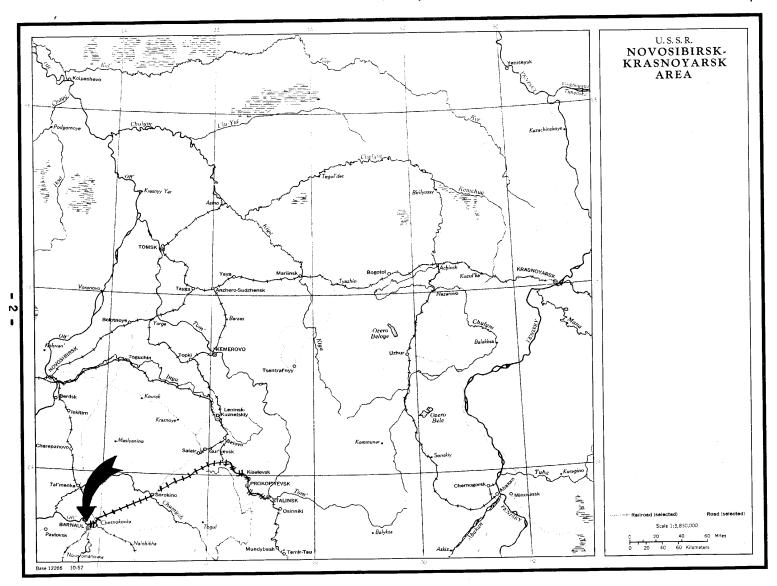
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RAILROAD YARDS AND SHOPS BARNAUL/CHESNOKOVKA, USSR

HTA/JM-2/58

21 March 1958



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RAILROAD YARDS AND SHOPS BARNAUL/CHESNOKOVKA, USSR

Barnaul is an important center of diversified industry in West Siberia, located on the Ob River, 115 miles south of Novosibirsk and 140 miles west of Stalinsk. Chesnokovka is located about five miles east of Barnaul on the opposite bank of the Ob River. The Barnaul/Chesnokovka area is the junction point of the South Siberian and the Turkestan-Siberian railroads.

The Barnaul/Chesnokovka rail complex includes the Railroad Station, Yards and Shops, Main, and a Railroad Car Repair Plant, both located in Barnaul, as well as the Railroad Station, Yards, and Shops, Altayskaya and the Railroad Car Manufacturing Plant, Altayskaya, which are located in Chesnokovka. The major components of these installations are annotated on the following photographs and sketch and are described in accompanying keys.

The area is covered by photography of local standard time. Fifteen locomotives and approximately 2,000 railroad cars, in trains or lines of 15 or more cars, were present in the two rail yards. Detailed data on these cars and locomotives are presented in Tables 1 through 4.

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KEY TO ANNOTATIONS

BARNAUL RAIL FACILITIES

Railroad Station, Yards, and Shops, Main

- 1. Railroad bridge over the Ob River, single track, 2,640' long, wide: Consists of 7 steel through-truss spans, each 360' long, and 2 deck-type approach spans, each 60' long. A second steel through-truss bridge using the same concrete piers is under construction, and 4 of the 7 spans are complete at the time of photography.
- 2. Choke points. Over-all length of installations, 10,500'.
- 3. Holding yard, 6 tracks wide, 3,000' long.
- 4. Holding yard, 2 tracks wide, 1,260' long.
- 5. Passenger loading/unloading platform, concrete, 1,000' x 20'.
- Turning wye, effective length 250'.
- 7. Passenger way station, 125' x 25', with adjoining concrete loading/ unloading platform, 1,000' x 20'.
- 8. Double-track rail line through narrow cut.
- 9. Holding yard, 12 tracks wide, 1,300' long; 11 tracks dead-end.
- 10. Locomotive servicing facilities.

Servicing yard, 6 tracks wide, 1,900' long.

Overhead watering facility;, 100' x 20', over three tracks; 30' diameter water tank.

Overhead coaling facility, 130' x 40', over four tracks; connected to coal unloader.

Locomotive servicing building, 115' x 60', with two through tracks.

Turntable, 100' diameter.

Two storage buildings, 220' \times 35' and 80' \times 25'.

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KEY TO ANNOTATIONS (continued)

- 11. Holding yard, 7 tracks wide, 1,700' long.
- 12. Locomotive repair facilities.

Locomotive repair yard, 17 tracks wide, 900' long. Two locomotive repair shops, $170' \times 90'$ with 5 tracks entering, and $180 \times 100'$ with 9 tracks entering. Five machine shops, $170' \times 25'$, $140' \times 100'$, $130' \times 35'$, $100' \times 40'$, and $90' \times 35'$. Roundhouse, 18 stalls, with 65' diameter turntable. Three storage buildings, $80' \times 35'$, $75' \times 25'$, and $60' \times 35'$. Water tower, 25' diameter.

- 13. New administration building under construction, 390' x 130'.
- 14. Passenger station, $190' \times 40'$.
- 15. Classification yard, 25 tracks wide; 4,200' maximum length, 1,650' average length.
- 16. Two freight yards. One, 5 tracks wide and 1,200 $^{\circ}$ long, serves 3 storage buildings, 300 $^{\circ}$ x 65 $^{\circ}$, 150 $^{\circ}$ x 45 $^{\circ}$, and 150 $^{\circ}$ x 35 $^{\circ}$. The other, 5 tracks wide and 850 $^{\circ}$ long, serves 2 freight warehouses, 400 $^{\circ}$ x 50 $^{\circ}$ and 155 $^{\circ}$ x 35 $^{\circ}$.

Barnaul Railroad Car Repair Plant

- 1. POL storage area, approximately 200' x 110'. Contains one vertical tank, 15' diameter and approximately 15' high, and 9 small horizontal tanks, 25'-40' tong, 5'-10' wide.
- 2. Lumber storage area.
- 3. Probable car repair shop under construction 240' x 100'.
- 4. Workshop building, 125' x 40' with one track entering.

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KEY TO ANNOTATIONS (continued)

- 5. Car repair shop, $360^{\circ} \times 60^{\circ}$ with two through tracks.
- Probable wheel shop and machine shop, a large, irregular-shaped building with total roof cover of 60,000 sq. ft., with 3 through tracks.
- 7. Two administration buildings, $140' \times 75'$ and $110' \times 50'$.
- 8. Road entrance to installation.
- Heat and steam plant, L-shaped, 260' x 50', and 95' x 60'. Conveyor 190' long on west end of building. Possible cooling tower, 15' diameter.
- 10. Forge, approximately 310' x 100'.
- 11. Foundry, 190' x 65'. Two storage-type buildings, 115' x 25' and 80' x 25' are located along south side of foundry.
- 12. Car repair shop, 330' x 155' with three through tracks.
- 13. Lumber processing building, 435' x 65'.
- 14. Car repair yard, 6 tracks wide, 1,200' long.
- 15. Lumber kiln, 170' x 100', with attached boilerhouse, 50' x 40'.
- 16. Lumber storage area.
- 17. Carrepair-shop, 320! x 50' with two tracks entering.
- 18. Workshop building, 190' x 60'.
- 19. Rail entrance to installation.

(Several additional storage buildings are scattered throughout the plant area.)

KEY TO ANNOTATIONS

CHESNOKOVKA RAIL FACILITIES

Railroad Station, Yards, and Shops, Altayskaya

- 1. Choke points. Over-all length of installation, 17,600'.
- 2. Turning wye, effective length, 575'.
- 3. Holding yard, 6 tracks wide, 2,900 long.
- 4. Boilerhouse, $80' \times 80'$, with detached stack.
- Locomotive repair yard, 6 tracks wide, 620' long.
 Locomotive repair shop, 195' x 130' with 6 tracks entering.
 Workshop, 150' x 80'.
- 6. Fenced open storage area, 1550' x 340', served by 9 tracks.
- 7. Holding yard, 8 tracks wide, 2,800' long.
- 8. Receiving/forwarding yard, 8 tracks wide, 5400' long.
- Passenger station, 115' x 50'.
 Water tower, 35' diameter.
 Overhead footbridge, 300' long.
- Classification yard, 11 tracks wide; maximum length 5,300, average length 2,900.

Railroad Car Manufacturing Plant, Altayskaya

- 11. Lumber kiln, 340' x 35'.
- 12. Two shop buildings, 310' x 115' and 310' x 100',
- 13. Car assembly shop, 560' x 210', with bridge crane along entire east side of building.

KEY TO ANNOTATIONS (continued)

- 14. Car assembly shop, 590' x 130'.
- 15. Probable metalworking shop, 590' x 80', with a bridge crane 280' long extending from south end of building.
- 16. Shop building, 695' x 125' (115' x 50' roof section under repair).
- 17. Lumber storage area.
- 18. Forge, 460' x 80'.
- 19. Two storage buildings, 200' x 50' and 130' x 100'.
- 20. Three shop buildings, $430' \times 165'$, $380' \times 130'$, and $300' \times 100'$.
- 21. Administration axes. One T-shaped building, 100' x 50' and 80' x 50', one building 130' x 50', and six smaller buildings.
- 22. Boilerhouse, 200' x 65'.
- 23. Lumber processing area. One L-shaped shop building 100' x 100' with 100' x 35' wing, one shop 230' x 50', two storage buildings 150' x 50' and 195' x 35', and a few small buildings and lumber piles in the area.

Table 1. Description of Trains and Lines of Cars (15 or more) present in Barnaul Railroad Station, Yards, and Shops, Main

| Cars in Train (number) | Length of Train (feet) | 4-Axle Cars (no. and type) | 2-Axle Cars (no. and type) | Locomotives (no. and type) |
|------------------------|------------------------|---|-------------------------------|----------------------------|
| 19 | 870 | 7 Box 10 Gondola | 2 Tank | None |
| 21 | 820 | 12 Box | 9 Вож | None |
| -31 | 1200 | 9 Box 2 Gondola 3 Passenger 1 Tank | 11 Box 5 Gondola | l Steam |
| 17 | 700 | 9 Box 3 Gondola | 5 Box | None |
| 17 | 700 | 13 Box 1 Flat | 3 Вох | None |
| 22 | 900 | 4 Box 5 Hopper | 2 Box 4 Flat 7 Hopper | l Steam |
| 21 | 770 | 7 Box 1 Gondola 1 Hopper | ll Box l Gondola | None |
| 32 | 1000 | 5 Box 2 Flat 2 Gondola | 19 Box 3 Flat 1 Gondola | None |
| 24 | 1000 | 8 Box 2 Gondola 6 Hopper | 6 Box 2 Flat | None |
| 23 | . 900 | 20 Tank | 3 Вох | None |

Table 1. Description of Trains and Lines of Cars at Barnaul (cont'd)

| Cars in Train | Length of Train | 2-Axle Cars | | Locomotives |
|-----------------|-----------------|----------------|-----------------|---------------|
| (number) | (feet) | (no. and type) | (no. and type)(| no. and type) |
| 46 | 1750 | 18 Box | 14 Box | None |
| + | | 4 Flat | 9 Flat | 110116 |
| | | l Gondola | , 1100 | |
| | | | | |
| 43 | 1800 | ll Box | 13 Box | None |
| | | 13 Flat | 6 F lat | |
| 57 ⁻ | 2300 | 12 Box | 17 Box | None |
| | | l Flat | | |
| | | 14 Gondola | | |
| | | 13 Tank | | |
| 46 | 1850 | 11 Box | 8 Box | None |
| | | 3 Flat | 6 Flat | |
| | | 2 Gondola | | |
| | | 16 Tank | | |
| 51 | 2000 | 22 Box | 13 Box | None |
| | | 5 Flat | 3 Flat | |
| | | 3 Tank | 5 Tank | |
| 45 | 1900 | 15 Box | 3 Box | None |
| | | 10 Flat | 8 Flat | |
| | | 9 Gondola | | |
| 19 | 840 | 6 Box | l Box | None |
| | | l Flat | l Flat | |
| | | 10 Gondola | | |
| 24 | 1000 | 3 Box | 4 Box | None |
| | | l Flat | 3 Gondola | |
| | | 13 Gondola | | |
| 49 | 1900 | 24 Box | 19 Box | l Steam |
| | | l Flat | | |
| | | 5 Tank | | |

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Table 1. Description of Trains and Lines of Cars at Barnaul (cont'd)

| Care in Train | Length of Train | 4-Axle Cars | 2-Axle Cars | Locometives |
|------------------------|-----------------|----------------|----------------|----------------|
| Cars in Train (number) | (feet) | (no. and type) | (no. and type) | (no. and type) |
| | | | | <u></u> |
| 58 | 2360 | 23 Box | 10 Box | None |
| | | 6 Flat | 5 Flat | |
| | | 14 Tank | | |
| 52 | 2200 | 28 Box | 9 Box | None |
| 36 | 2200 | 8 Gondola | 2 Flat | 110110 |
| | | 4 Tank | l Tank | |
| | | | | |
| 60 | 2900 | 25 Box | 23 Box | None |
| | | l Flat | 8 Flat | |
| | | 3 Tank | | |
| 2.4 | 1500 | 2 m - | 2 D | 1 (4 |
| 34 | 1500 | 2 Box | 3 Вож | l Steam |
| | | 29 Gondola | | |
| 53 | 2180 | 21 Box | 5 Вох | None |
| | | 7 Gondola | 17 Gondola | |
| | | 3 Tank | | |
| : 54 | 25.00 | 5420 11 | 3.7 | 1.0 |
| 54 | 2500 | 54 Gondola | None | l Steam |
| 16 | 960 | 14 Passenger | 2 Box | l Steam |
| | | J | | |
| 16 | 660 | 2 Box | 10 Flat | None |
| | | 2 Gondola | 2 Gondola | |
| 21 | 690 | 3 Вох | 12 Box | None |
| 21 | 0,0 | l Flat | 4 Flat | Hone |
| | | l Gondola | 1 1 140 | |
| | | | | |
| 18 | 615 | 6 Box | 12 Box | None |
| | | | | |
| 25 | 920 | 12 Box | 13 Box | None |
| 18 | 700 | 6 Box | 6 Box | None |
| | | 2 Flat | 2 Flat | |
| | | 2 Gondola | | |
| | | - 11 - | | |
| | | | | |

Table 1. Description of Trains and Lines of Cars at Barnaul (cont'd)

| Cars in Train (number) | Length of Train (feet) | 4-Axle Cars (no. and type) | 2-Axle Cars (no. and type) | *** |
|------------------------|------------------------|-------------------------------|----------------------------|------|
| 29 | 900 | l Box | 28 Gondola | None |
| 77 | 3560 | 13 Box 1 Flat 60 Hopper | 3 Вох | None |
| Total 1138 | | 734 | 404 | -6 |

Table 2. 4-Axle and 2-Axle Cars at Barnaul, by Type of Car

| Type of Ca r | 4-Axle | 2-Axle | Total Cars |
|---------------------|--------|--------|------------|
| Box | 338 | 259 | 597 |
| Flat | 53 | 73 | 126 |
| Gondola | 172 | 57 | 229 |
| Hopper | 72 | 7 | 79 |
| Passenger | 17 | - | 17 |
| Tank | 82 | 8 | 90 |
| | | | |
| TOTAL | 734 | 404 | 1138 |

Table 3. Description of Trains and Lines of Cars (15 or more) Present in Chesnokovka Railroad Station, Yards and Shops, Altayskaya

| Cars in Train (number) | Length of Train | | 2-Axle Cars | Locomotives |
|------------------------|-----------------|--|----------------------------|----------------|
| (number) | (feet) | (no. and type) | (no. and type) | (no. and type) |
| 60 | 2500 | 31 Box 6 Tank | 21 Box | None |
| | | l Flat l Gondola | | |
| 19 | 700 | 9 Box 1 Flat | 9 Box ' | None |
| 53 | 2200 | 19 Box 2 Flat 8 Gondola 6 Tank | 17 Box 1 Flat | l Steam |
| 51 | 2100 | 12 Box 4 Gondola 19 Tank | 10 Box 6 Tank | l Steam |
| 47 | 2000 | 11 Box 8 Gondola 8 Hopper 13 Tank | 7 Вох | 1 Steam |
| 51 | 900 | 11 Box 13 Flat 1 Tank | 23 Box 3 Flat | None |
| 43 | 1650 | 9 Box 4 Flat 6 Tank | 19 Box 2 Flat 3 Tank | None |
| 66 | 2600 | 22 Box 4 Flat 9 Tank | 27 Box 4 Flat | None |
| | | | | |
| | | | | |

Table 3. Description of Trains and Lines of Cars at Chesnokovka (cont'd)

| Cars in Train | Length of Train | 4-Axle Cars | 2-Axle Cars | Locomotives |
|---------------|-----------------|--|---------------------------|-----------------------|
| (number) | (feet) | (ho. and type) | (no. and type) | (no. and type) |
| 61 | 2400 | 3 Box 20 Flat 8 Hopper | 24 Box 6 Flat | l Steam |
| 14 | 620 | 2 Gondola 5 Hopper 6 Tank | 1 Gondola | None |
| 61 | 2600 | 23 Box 2 Gondola 15 Hopper 3 Tank | 13 Box 5 Flat | 1 Diesel/ Electric |
| 34 | 770 | 21 Box 8 Flat | 3 Box 2 Flat | 2 Steam |
| 32 | 730 | l Box 2 Flat 28 Hopper | l Flat | None |
| 32 | 640 | 9 Box 10 Hopper | 7 Box 3 Flat 3 Tank | None |
| 3.0 | 730 | 30 Box | None | None |
| 31 | 730 | 30 Box | l Box | None |
| 62 | 1100 | 32 Box | 30 Box | 1 Steam |
| 48 | 1150 | 48 Box | None | None |
| 40 | 600 | l Box l Flat | 38 Box | l Steam |
| Total 835 | | 5 4 6 | 289 | 9 |

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Table 4. 4-Axle and 2-Axle Cars at Chesnokovka, by Type of Car

| Type of Car | 4- A xle | 2-Axle | Total Cars |
|-------------|-----------------|--------|------------|
| Box | 322 | 249 | 571 |
| Flat | 56 | 27 | 83 |
| Gondola | 25 | 1 | 26 |
| Hopper | 74 | - | 74 |
| Tank | 69 | 12 | 81 |
| TOTAL | 546 | 289 | 835 |

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REQUIREMENT: This Joint Photographic Intelligence Memorandum has been prepared at HTAUTOMAT by CIA with Army assistance, to satisfy Army requirements and RR/HTA/E/R-71/57 which requests a description of railroad facilities in Barnaul/Chesnovkovka, USSR.

REFERENCES:

ATMP:

0162-9999-0-25A, 1st Ed., Mar 1955 0162-9999-100A, 1st Ed., Jul 1951

COORDINATES:

Barnaul, 53°20'N/83°48'E Chesnokovka, 53°25'N/83°56'E

B.E. NUMBERS:

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Barnaul

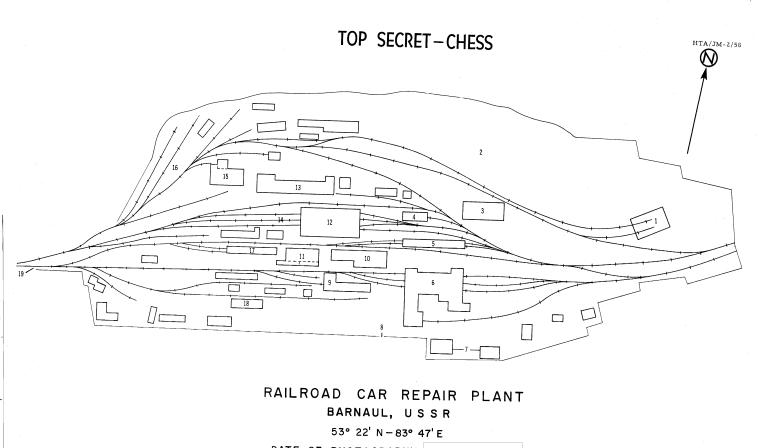
Barnaul Railroad Car Repair Plant
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Shops, Main
Barnaul Railroad Car Manufacturing
Plant, Altayskaya
Barnaul Railroad Station, Yards, and

Shops, Altayskaya

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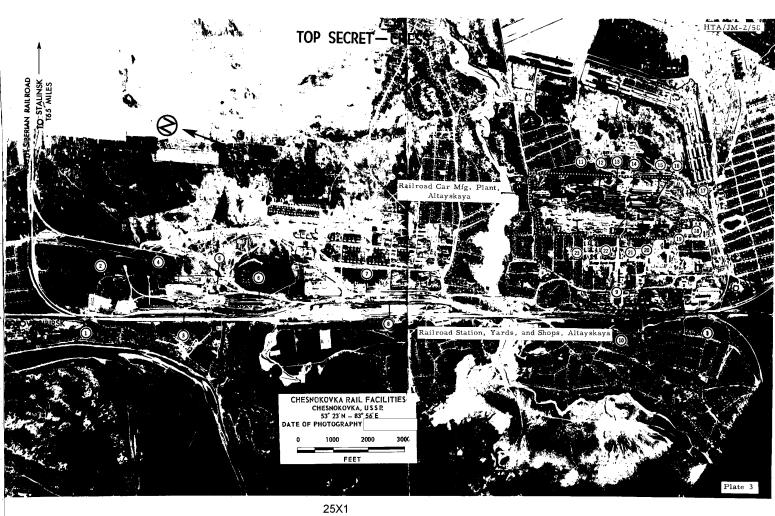
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